

Product datasheet for **MG212004**

A2m (BC072642) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	A2m (BC072642) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	A2m
Synonyms:	A2mp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG212004 representing BC072642 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGAAGCGCTGGCTCCCAAGCCTGGCCCTGCTGCCGCTGCCGCCACCGCTGCTGCTGCTGTTGC
TGCTGCTGCCACAAATGCCTCAGCACCACAGAAACCAATCTACATGGTGATGGTTCCCTCCCTGCTCCA
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GAGGCTGTGCTGGAGCGGAAGGAGTTGGTCTTCTATTATCTGATGATGGCAAAGGGAGGCATTGTTCCGGG
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GAAAGTCTATGATTACTACGAGAAAGATGAGTTTGCAGTTGCAAAATACAGTGTCTCCCTGCAGTGCAGGT
TATGGAATGCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG212004 representing BC072642
 Red=Cloning site Green=Tags(s)

MGKRWLPSLALLPLPPLLLLLLLLLLPTNASAPQKPIYMMVPSLLHAGTPEKGCLLFNHLNETVTVKVS
 MESVRGNQSLFTDLVVDKDLFHCAFIVPQSSSNEVMFLTVQVKGPTHEFRRRSTVLIKTKESLVFAQTD
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 VVIRTESGRTEVHPFSVKEFVLPKFEVKVAVPETITILEEEMNVSVCGIYTYGKPVPGHVTVNICRKYSN
 PSSCFGEESLAFCEKFSQQLDGRGCFSQLVKTFSFQKQYEMQLDVNAKIQEEGTGVEETGKGLTKIT
 RTITKLSFVNVDTHFRQGIPIFVGQVLLVDGRGTPIPYEMIFIGADEANQNINNTTDDKNGLARFSINTDDI
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 GVNKIPAAHYLVSQGHMADFLESSEPTETTRSYPETWIWDLVIDSTGVAEMEVTPDITIEWKAGAF
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 KEQKSHCICMNERHTMSWAVIPKSLGNVFTVSAEALDSKELCRNEVPVPERGKKDITIKSLLVEPEGL
 ENEVTFNSLLCPTGAEVSEQISLKLPSDVVEESARASVTVLGDILGSAMQNTQDLLKMPYGCQEVMVLF
 APNIYVLDYLNETEQLTQEIKTKAITYLNTGYQRQLNYKHRDGSYSTFGDKPGRSHANTWLTAFVLKSA
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 VRNALFCLDTAWKSARRGASGNHVVTKALLAYAFALAGNQDTKKEILKSLDEEAVKEDNSVHWTRAQKPR
 VPADLWYQPQAPSAEVEMTAYVLLAYL TTEL VPTREDL TAAMLIVKWLTKQONSHGGF SSTQDTVVALHA
 LSKYGAATFTRAKKAAHVTIQSSGAFYTKFQVNNNDNQLLLQRVTLPTVPGDYTAKVAGEGCVYLQTSKY
 SVLPREKEFPFALVVQTLPGTCEDLKAHTTFQISLNI SYIGSRSDSNMAIADVKMVSGF IPLKPTVKMLE
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 YGNA

TRTRPLE - GFP Tag - V

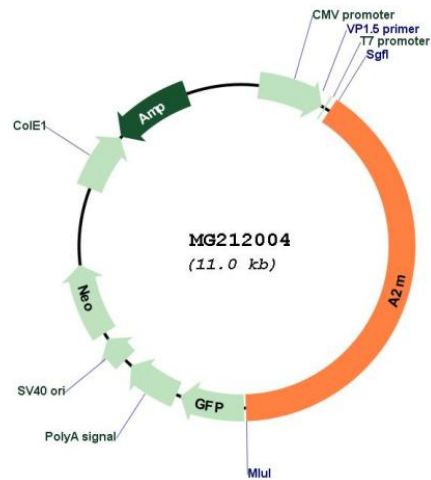
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: BC072642

ORF Size: 4424 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [BC072642](#), [AAH72642](#)

RefSeq Size: 4615 bp

RefSeq ORF: 4424 bp

Locus ID: 232345

Cytogenetics: 6 57.49 cM

Gene Summary: Is able to inhibit all four classes of proteinases by a unique 'trapping' mechanism. This protein has a peptide stretch, called the 'bait region' which contains specific cleavage sites for different proteinases. When a proteinase cleaves the bait region, a conformational change is induced in the protein which traps the proteinase. The entrapped enzyme remains active against low molecular weight substrates (activity against high molecular weight substrates is greatly reduced). Following cleavage in the bait region a thioester bond is hydrolyzed and mediates the covalent binding of the protein to the proteinase (By similarity).
[UniProtKB/Swiss-Prot Function]